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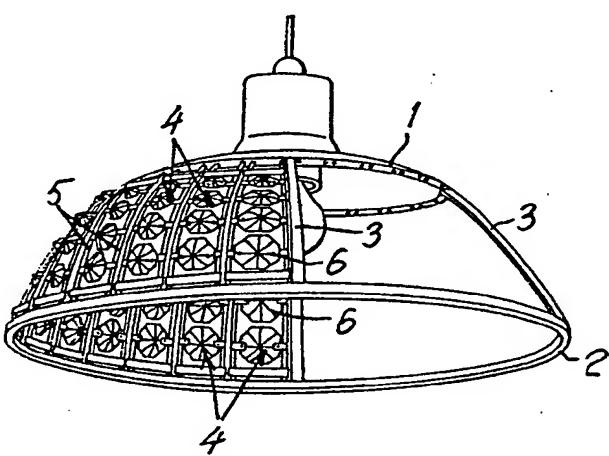
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㉚ Crystal elements light fixture.

㉛ At least a part of the light fixture consists of at least one row of crystal elements (6) mounted between two supporting lateral rods (5) that can be fastened, preferably in a removable manner, between two spaced apart co-axial rings (1, 2) of the supporting structure of the light fixture.



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Crystal elements light fixture.

10 This invention relates to crystal elements light fixtures. By the term "crystal elements" are called, according to the invention, generally faceted pieces of any desired shape, such as, for example, a round, a polygonal, a quadrangular, a triangular, an oval, a flat, a lenticular, a 15 spherical shape, or the like, which are made of crystal, glass, strass, plastics, or the like, and preferably are translucent or transparent, colourless or colored.

20 The invention aims to realize crystal elements light fixtures of the above-said kind, that can be made in a particularly easy and simple manner, and that permit to obtain special structures and ornamental effects.

25 To this end, the invention provides a light fixture in which at least a part thereof consists of at least one row of crystal elements mounted between two supporting lateral rods. The two supporting rods may be either parallel to, or convergent toward, or divergent from each other, while the crystal elements may be fitted directly on the two rods, or else they may be fastened to the said rods by means of hooks, brackets, or the like. However, it is also 30 possible to fasten the crystal elements by means of hooks,

1 brackets, or the like, to crystal-supporting crosspieces  
extending between the two supporting lateral rods, and  
which may be made of one piece with the said rods, or may be  
fastened and coupled thereto, more particularly, fitted  
5 thereon by means of end eyelets.

The two supporting lateral rods that are associated  
with each row of crystal elements, may be made of one piece  
with the supporting structure of the light fixture, or they  
may be added and attached in any suitable manner to a  
10 supporting structure of the light fixture.

More particularly, in one advantageous embodiment of  
the invention, the two supporting lateral rods that are  
associated with one row of crystal elements, may be inter-  
connected so as to form with the row of crystal elements  
15 interposed therebetween, a crystal-supporting independent  
structural element. These crystal-supporting structural  
elements may be of any shape and size, and together with a  
supporting structure, they permit to compose light fixtures  
of any desired shape and size, thus allowing large possibi-  
20 lities to the creative impulse.

The above-said structural elements formed by a row  
of crystal elements between two supporting rods, may be  
firmly secured to the supporting structure of the light  
fixture. Preferably, however, according to one embodiment of  
25 the invention, the said crystal-supporting structural  
elements are attached to the supporting structure of the  
light fixture in any suitable, easily disassemblable and  
re-assemblable manner, for example, by simply fitting them  
in. Thus, the cleaning of the light fixture is facilitated,  
30 since the individual structural elements comprising the

1 crystal elements can be disassembled from the supporting  
structure of the light fixture, to be more easily dusted or  
washed.

According to a further feature of the invention, the  
5 individual crystal elements are fixed to the brackets for  
fastening them on the respective supporting lateral rods or  
to their crosspieces by means of rivets, preferably by means  
of tubular rivets. The heads of the rivets may be small and  
flat, and do not protrude to an excessive degree, so that  
10 they do not form any projection on which there may be caught  
a cloth with which the crystal elements are normally cleaned  
or dusted.

Further features of the light fixture according to  
15 the invention will appear in the other dependant claims, and  
in the following specification of some embodiments shown in  
the annexed drawings, in which:

Figure 1 is a perspective view illustrating a first  
embodiment of a crystal elements light fixture according to  
20 the invention, in which some parts have been omitted in  
order to more clearly show the supporting structure of the  
light fixture.

Figure 2 is an elevational view with parts in  
section, illustrating a disassemblable structural element of  
25 the light fixture according to Figure 1.

Figure 3 is an elevational view illustrating a  
modified embodiment of the structural element according to  
Figure 2.

Figures 4 and 5 are cross sectional views, in an  
30 enlarged scale, illustrating two different ways of carrying

1 out the fixing of a crystal element according to Figures 2 and 3 to the supporting respective lateral rods.

Figure 6 is an elevational view illustrating another embodiment of the structural element according to Figure 2.

5 Figure 7 is a perspective view, in an enlarged scale, illustrating a portion of the structural element according to Figure 6.

Figure 8 is a perspective view illustrating the blanked element from which there are obtained the crystal-  
10 -supporting crosspieces for the structural element according to Figures 6 and 7.

Figure 9 is an elevational view illustrating a modified embodiment of the structural element according to Figure 6.

15 Figure 10 is an elevational view illustrating another embodiment of a structural element for light fixtures according to the invention.

Figure 11 is an elevational view illustrating another way of fixing a crystal element to the two supporting  
20 lateral rods.

Figure 12 is a sectional view, in an enlarged scale, taken on line XII-XII in Figure 11.

Figure 13 is a perspective view illustrating another embodiment of a light fixture according to the invention, in  
25 which some parts have been omitted.

Figure 14 is a vertical partial sectional view, in an enlarged scale, through the light fixture according to Figure 13.

Figure 15 is a perspective view illustrating a  
30 further embodiment of a crystal elements light fixture

1 according to the invention, in which some parts have been omitted in order to more clearly show the supporting structure of the light fixture.

5 Figure 16 is an elevational view, in an enlarged scale, illustrating a piece of the light fixture according to Figure 15.

Figure 17 is a cross sectional view, in an enlarged scale, taken on line XVII-XVII in Figure 16.

10 Figure 18 is an elevational view illustrating a portion of a modified embodiment of the light fixture according to Figures 15 and 16.

Figure 19 is a perspective view, in an enlarged scale, illustrating a crystal-supporting crosspiece for the embodiment according to Figure 18.

15 Figure 20 is a perspective view illustrating another embodiment of a light fixture according to the invention, in which some parts have been omitted.

Figure 21 is an elevational view, in an enlarged scale, illustrating a structural element for the light 20 fixture according to Figure 20.

Figure 22 is a cross sectional view, in an enlarged scale, taken on line XXII-XXII in Figure 21.

Figure 23 is an elevational partial view illustrating a further embodiment of a light fixture according to the 25 invention.

The light fixture shown in Figure 1 has a supporting structure that, for example, consists of an upper plate or ring 1, and of a lower ring 2 having a greater diameter than 30 the upper ring 1, and which is connected thereto, for

1 example, by means of one or more arcuate bars 3. Between the  
upper ring 1 and the lower ring 2, crystal-supporting  
structural elements 4 are mounted the one beside the other,  
and consist each of two spaced apart, supporting lateral  
5 rods 5 extending between the two rings 1 and 2, as well as  
of a plurality of crystal elements 6 arranged the one over  
the other in a row, between the two supporting lateral rods  
5, and carried by the said rods. In the embodiment according  
to Figures 1 to 10, the two supporting lateral rods 5  
10 converge upwardly toward each other, since the light fixture  
is cap-shaped, but they may also converge downwardly, or may  
be parallel to each other, just as in the embodiment  
according to Figure 11. Moreover, in the embodiments  
according to Figures 1 to 12, the supporting lateral rods 5  
15 are so made as to be elastically flexible, and in proximity  
of their ends they are interconnected by crosspieces 8. The  
crosspieces 8 may be connected to the supporting lateral  
rods 5 in any suitable manner. Thus, for example, the two  
rods 5 may be fitted through bores in at least one of the  
20 crosspieces 8, and may be fixed to the said crosspiece by  
welding (as shown for the upper crosspiece 8 in Figures 2,  
3, 6 and 10), or else by means of locking screws 7 (as  
shown for the lower crosspiece 8 in Figures 2, 3, 6 and 10).  
Furthermore, at least one of the crosspieces 8 may be made  
25 of one piece with the two supporting lateral rods 5, just as  
in the embodiment shown in Figure 9.

The two crosspieces 8 for connection of the lateral  
rods 5 are arranged at a distance from the respective ends  
of rods 5, so that these rods present freely protruding ends  
30 105. Each crystal-supporting structural element 4 is

1 assembled to the supporting structure of the light fixture  
by elastically bending it either inwardly or outwardly and  
by inserting the protruding ends 105 of the two supporting  
lateral rods 5 into respective bores provided in the upper  
5 ring 1 and in the lower ring 2 of the light fixture, as  
shown particularly in Figure 2. Such an operation for  
assembling the light fixture is extremely simple and quick.  
The crystal-supporting structural element 4 is held in  
assembled position only owing to its elastic deformation,  
10 and so it can be easily and quickly disassembled, for  
example, for cleaning it, and can be then re-assembled even  
by inexpert persons.

The crystal elements 6 may have any desired shape,  
such as, for example, a hexagonal shape as in Figures 2, 6,  
15 7, 9 and 11, or a square shape as in Figure 3, and are  
generally faceted, so as to refract and/or reflect light in  
a plurality of directions. The crystal elements 6 may be of  
glass, crystal, strass, plastics, or the like, and they may  
be transparent, translucent, or dull, colourless or coloured.  
20 Moreover, the crystal elements 6 forming a row between the  
two supporting lateral rods 5, may be oriented in any  
desired way relatively to the said rods 5. Thus, for example,  
in the embodiments according to Figures 4 to 9, the crystal  
elements 6 have a two-pyramid configuration, with the bases  
25 of the two pyramids being substantially co-planar to each  
other and to the longitudinal axes of the two supporting  
lateral rods 5. In the embodiment according to Figure 10,  
the crystal elements 6 still having a two-pyramid configura-  
tion, are instead arranged with the bases of the two pyramids  
30 being parallel to each other, but being substantially

1 perpendicular to the longitudinal axes of the two supporting lateral rods 5.

The crystal elements 6 may be fixed in any suitable manner to the two supporting respective lateral rods 5. In 5 the embodiment according to Figure 2, each crystal element 6 is fixed to the two rods 5 by means of two fixing opposite brackets 9 that may be made of metal, and that on one side are fastened on the relative rods 5, while on the other side they are fixed to the associated crystal element 6, each 10 bracket by means of a metallic tubular rivet 10. More particularly, in the embodiment according to Figure 4, each fixing bracket 9 is so bent as to present a small sleeve or eye hook 109 that encompasses the rod 5, and from which there extends a wing 209, through which the rivet 10 is 15 passed and is fitted through a respective bore in the crystal element 6. In the modified embodiment according to Figure 5, two wings 209 extend from the small sleeve 109 by means of which the bracket 9 encompasses the rod 5, and these wings grip therebetween the crystal element 6, and are fixed by 20 means of only one rivet 10 on opposite sides of said element. Between the fixing brackets 9 fastened on the same supporting lateral rod 5, spacers 11 may be provided, which consist, for example, of small tubes or helicoids of wire. These spacers 11 are provided also between the end crosspieces 8 25 for connection of rods 5, and the brackets 9 for fixing the upper and lower crystal elements 6.

In the embodiment according to Figure 3, each crystal element 6 is fixed to the two supporting lateral rods 5 by means of two opposite pairs of brackets 9. Each fixing 30 bracket 9 may be, for example, made as described by referring

1 to Figures 4 and 5. The spacers 11 are of course provided only between the brackets 9 for fixing the individual crystal elements 6, and between these brackets and the end crosspieces 8.

5 In the embodiment according to Figures 6 to 8, the crystal elements 6 are fixed to crystal-supporting crosspieces 12, that in turn are secured to the two supporting lateral rods. More particularly, as shown in Figures 7 and 8, each crystal-supporting crosspiece 12 has a median 10 portion 112 which at either end is provided with two diverging arms 212 terminating each with an eyelet 312. Each one of the supporting crosspieces 12 is fitted by means of these eyelets 312 on the two supporting lateral rods 5. The crystal elements 6 are placed between the crystal-supporting 15 crosspieces 12, and are fixed to pierced tongues 412 in the median portion thereof, by means of tubular rivets 10. The above disclosed crystal-supporting crosspiece 12 may be made in form of a flat piece, shown in Figure 8, which is preferably blanked from sheet-metal, and the end eyelets 312 20 that are initially co-planar to the median portion 112 and to the tongues 412 in the crosspiece 12, are then oriented perpendicularly to the longitudinal axes of the supporting lateral rods 5 by suitably twisting the respective arms 212, as it clearly appears in Figure 7. In the embodiment 25 according to Figures 6 to 8, it is not necessary to provide any spacers between the crystal-supporting crosspieces 12, since the crystal elements 6 themselves, fixed to the said crosspieces 12, act as spacers. Spacers may be possibly provided only between the crystal-supporting end crosspieces 30 12' at the extremities of the row of crystal elements 6, and

1 the respective crosspieces 8 for connection of the two supporting lateral rods 5. However, the said crystal-supporting end crosspieces 12' may be made in such a manner as to present abutment portions cooperating with the 5 respective connection crosspieces 8, as shown in Figure 6.

In the embodiments according to Figures 2 to 8 and 10 to 12, the two lateral rods 5 for the support of each crystal-supporting structural element 4 have a round profile, and may consist of metallic elastic wire. In the embodiment 10 according to Figure 9, the two supporting rods 5 are instead flat, and are made of one piece not only with the flat end crosspieces 8 for connection between the said rods 5, but also with the crystal-supporting intermediate flat crosspieces 12. Practically, therefore, each crystal-supporting 15 structural element 4 consists of a supporting piece provided with at least one row of slots, in each one of them there is received a crystal element 6 that by means of rivets 10 is fixed to at least two tongues 412 extending into each one of the said slots. In the shown embodiment, the said slots are 20 delimited by the two lateral rods 5 and by the several crosspieces 8, 12, while the tongues 412 for fixing the glass elements are integral with the said crosspieces 8 and 12, similarly to the embodiment according to Figures 6 to 8. However, in the modified embodiment according to Figure 9, 25 the tongues 412 may be provided also or only in correspondence of the lateral rods 5.

In the embodiment according to Figure 10, the crystal elements 6 are fixed directly to the two supporting lateral rods 5, more particularly, they are provided with 30 two respective bores by means of which they are fitted on

1 the said rods 5. Spacers are provided between the individual  
5 crystal elements 6, and in the shown embodiment, they  
consist of beads 13 fitted on the said lateral rods 5.

In the embodiment according to Figures 11 and 12, a  
5 wire 14 is helically wound around each supporting lateral  
rod 5, and each crystal element 6 is fastened by means of  
its two opposite rivets 10 on a loop 114 formed by the wire  
14 wound around the respective rod 5.

Also the structure of the light fixture shown in  
10 Figures 13 and 14 comprises an upper plate or ring 1 and a  
lower ring 2, but differently from the embodiment according  
to Figures 1 and 2, the two rings, the upper ring 1 and the  
lower ring 2, are not rigidly and firmly interconnected by  
means of one or more bars 3, but are interconnected by means  
15 of the crystal-supporting structural elements 4 extending  
between the said rings 1 and 2, so that in this case they  
perform also a supporting action. The crystal-supporting  
structural elements 4 may be firmly fixed, for example  
welded, to the two rings 1, 2 of the light fixture, or else  
20 they may be attached to the said rings 1, 2 in an easily  
disassemblable and re-assemblable manner, just as in the  
shown embodiment. To this end, the upper and lower free ends  
105 of the lateral rods 5 for the support of each crystal-  
supporting structural element 4 are fitted in respective  
25 bores in rings 1 and 2, and are locked in these bores, for  
example, by means of locking screws 15, as it appears  
particularly in Figure 14. For the kind of light fixture  
according to Figures 13 and 14 it is possible to use all the  
crystal-supporting structural elements 4, as previously  
30 described by referring to Figures 2 to 10.

1        In all of the above-described embodiments, it is not  
necessa<sup>r</sup>y to have all the individual crystal-supporting  
structural elements 4 inserted by means of the free ends 105  
of the supporting lateral rods 5, into the respective bores  
5 in rings 1 and 2 of the structure of the light fixture. For  
this purpose, instead of the said ends 105 of rods 5, it is  
possible to provide any other suitable pins or projections  
on the crosspieces 8 for the crystal-supporting structural  
element 4.

10       In the embodiment according to Figures 15 to 19, the  
supporting structure of the light fixture consists of an  
upper plate or ring 1 and of a lower ring 2, which is firmly  
connected to the upper ring 1 by means of a plurality of  
bars 3, to which the crystal elements 6 arranged the one  
15 over the other in a row between the said bars 3, are  
directly fixed. Therefore, the bars 3 form a fixed integrant  
part of the supporting structure of the light fixture, and  
at the same time perform the function of the lateral rods 5  
for the support of the crystal elements 6. Also in this case,  
20 the crystal elements 6 may be fixed to the bars 3 in any  
suitable manner. In the embodiment according to Figures 16  
and 17, saddle-shaped brackets 16 are provided for fixing  
the crystal elements 6, and are mounted on the bars 3  
astride thereof, and on either side of each bar 3 these  
25 brackets present projecting wings 116, to which the crystal  
elements 6 are fixed by means of rivets 10. Each crystal  
element 6 in one row of crystal elements 6 between two bars  
3, is then fixed at two opposite points to the wing 116 of  
30 two saddle-shaped brackets 16, which are mounted astride of  
the two lateral bars 3. The saddle-shaped brackets 16 may be

1 fixed to the respective bars 3, for example, by means of  
metallic wire, or else by squeezing on bars 3 their saddle-  
shaped portions.

In the modified embodiment according to Figures 18  
5 and 19, each crystal element 6 is fixed by means of rivets  
to the wings 117 of two crosspieces 17 that extend on  
opposite sides of the crystal element 6 between the two bars  
3, and are suitably fixed to said bars. More particularly,  
the crosspieces 17 have at their ends saddle-shaped portions  
10 217 by means of which they are mounted astride of bars 3,  
and are fixed thereto similarly to brackets 16.

In the embodiment according to Figures 20 to 22, the  
supporting structure of the light fixture comprises a lower  
plate or ring 2 from which crystal-supporting structural  
15 elements 4 freely extend in the upward direction. Each one  
of these crystal-supporting structural elements 4 is made as  
a self-standing element, and consists of a preferably rigid  
small bar, generally made of metal, which is "U" bent over  
itself so as to form two supporting lateral rods 5, between  
20 which the crystal elements 6 are arranged and fixed. The  
said small bar that, for example, consists of a metallic  
profiled element, may be bent in such a manner that the two  
lateral rods 5 will be either parallel to each other, or  
will diverge from, or converge toward their free ends. In  
25 proximity of their free ends, the said lateral rods 5 may be  
interconnected by means of a crosspiece 8. By the free ends  
105 of the two rods 5, each crystal-supporting structural  
element 4, thus made, is fitted, for example with a slight  
drive, in respective bores 18 provided in the lower ring 2  
30 of the light fixture, as shown in Figure 21. In this

1 embodiment, the self-standing crystal-supporting structural  
elements 4 are held in place on the supporting structure 2  
of the light fixture simply by friction, so that they can be  
very easily disassembled for cleaning them, and then re-  
5 -assembled again.

Also in the embodiment according to Figures 20 and  
21, the crystal elements 6 may be fixed to the two supporting  
lateral rods 5 in any suitable manner. In the shown example,  
each crystal element 6 partly overlaps the two lateral rods  
10 5, and is fixed thereto by means of rivets 10. At their  
opposite end to the crystal element 6, the heads of rivets  
10 are preferably embedded in corresponding recesses 205 in  
rods 5, so that they are not a nuisance when cleaning the  
crystal elements.

15 The supporting structure of the light fixture  
according to the embodiment shown in Figure 23, still  
comprises an upper ring 1 and a lower ring 2, between which  
parallel rows of crystal elements 6 are mounted. The crystal  
elements 6 of each row are directly fitted on two parallel  
20 rods 5 that extend between the two rings 1 and 2, and are  
fixed to said rings. In the shown embodiment, the two  
supporting lateral rods 5 associated with one row of crystal  
elements 6 consist of two branches of a generally metallic  
wire forming a " U " shaped loop between the two rings 1 and  
25 2, and which starts from one of these rings, for example,  
the lower ring 2, passes through two circumferentially  
spaced apart bores in the other ring, for example, the upper  
ring 1, and comes back to the first ring, to which it is  
suitably anchored by both of its extremities. Moreover,  
30 according to a further feature of the embodiment according

1 to Figure 23, on each supporting rod 5 that, particularly, is formed by one branch of a "U" shaped wire, there are alternately fitted the crystal elements 6 of both of the rows of crystal elements located at both sides of rod 5, so

5 that each rod 5 provides the support for two side-by-side arranged rows of crystal elements 6. Spacers consisting, for example, of beads 13 fitted on rods 5, are interposed between the individual crystal elements 6, and between these elements and the two rings 1, 2.

10 In the embodiment according to Figure 23, the rods 5 for supporting the crystal elements 6 form an integrant part of the supporting structure of the light fixture. The said crystal elements 6 and the spacing beads 13 provided therebetween, keep the two rings 1 and 2 at the required

15 distance from each other, even when the supporting rods 5 consist of flexible wires, just as it however occurs also in the embodiment according to Figures 13 and 14.

Of course, the invention is not limited to the described and shown embodiments. Thus, for example, in the

20 embodiments according to Figures 1, 13, 15 and 20, the section of the light fixture provided with crystal elements 6, and which particularly is composed of individual crystal-supporting structural elements 4, may be made with an outwardly concave instead of convex, shape. Moreover, in all

25 of these embodiments, the structure of the light fixture may be overturned, i.e., the ring 2 of a greater diameter may be placed above, and the ring 1 of a smaller diameter may be located below. Also in the embodiment according to Figure 20, the self-standing crystal-supporting structural elements 4

30 may extend downwardly, instead of upwardly, from any suitable

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1 supporting structure of a light fixture.

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CLAIMS

1. A crystal elements light fixture characterized in that it at least partly consists of at least one row of 5 crystal elements (6) mounted between two supporting lateral rods (3, 5).

10 2. The light fixture according to claim 1, characterized in that the crystal elements (6) are fixed to the supporting lateral rods (5) by means of brackets (9), each one of the said brackets being fastened on a rod (5) by means of at least one sleeve portion (109) thereof, and presenting at least one wing (209) to which the crystal element (6) is fixed.

15

20 3. The light fixture according to claim 1, characterized in that the crystal elements (6) are fixed to the supporting lateral rods (3) by means of brackets (16), each one of the said brackets overriding a supporting rod (3) with a saddle-shaped portion thereof, and presenting wings (116) for fixing two opposite crystal elements (6) at both sides of the said rod (3).

25 4. The light fixture according to claim 1, characterized in that the crystal elements (6) are fixed to crystal-supporting crosspieces (12) extending between the supporting lateral rods (5).

30 5. The light fixture according to claim 4, characterized in that the crystal-supporting crosspieces (12) are

1 made of one piece with the two supporting lateral rods (5).

6. The light fixture according to claim 4, characterized in that the crystal-supporting crosspieces (12) have 5 their ends provided with eyelets (312) by means of which they are fitted on the two supporting lateral rods (5).

7. The light fixture according to claim 4, characterized in that the crystal-supporting crosspieces (17) have 10 their ends provided with saddle-shaped portions (217) by means of which they are fastened on the two supporting lateral rods (3).

8. The light fixture according to claim 1, characterized in that the crystal elements partly overlap the two supporting lateral rods (5), and are directly fixed thereto.

9. The light fixture according to claim 1, characterized in that the crystal elements (6) are fitted on the two 20 supporting lateral rods (5).

10. The light fixture according to claim 9, characterized in that on one supporting rod (5) there are alternately fitted the crystal elements (6) forming two rows of crystal 25 elements, arranged on opposite sides of said rod (5).

11. The light fixture according to claim 1, characterized in that wires (14) are helically wound around the supporting lateral rods (5), and the crystal elements (6) 30 are fastened on loops (114) formed by enlarged turns of

1 these wires (14).

12. The light fixture according to claim 1, characterized in that the crystal elements (6) are fixed by means of 5 preferably tubular rivets (10) fitted through bores in the crystal elements (6).

13. The light fixture according to claim 1, characterized in that at least one head of the rivets (10) is 10 embedded in the crystal element (6) or in its support (5).

14. The light fixture according to claim 1, characterized in that spacers (11, 13) fitted on the supporting lateral rods (5), are provided between the individual 15 crystal elements (6).

15. The light fixture according to claim 1, characterized in that the supporting lateral rods (3) are made of one piece with the supporting structure (1, 2) of the light 20 fixture.

16. The light fixture according to claim 1, characterized in that the supporting lateral rods (5) are added and fixed to the supporting structure (1, 2) of the light fixture.

25

17. The light fixture according to claim 1, characterized in that the two supporting lateral rods (5) that are associated with one row of crystal elements (6), are interconnected so as to form with the crystal elements (6) 30 interposed therebetween, an independent crystal-supporting

1 structural element (4) for the composition of light fixtures,  
in combination with a supporting structure (1, 2).

18. The light fixture according to claim 17, characterized in that the crystal-supporting structural elements (4) are attached in an easily removable manner to the supporting structure (1, 2) of the light fixture.

19. The light fixture according to claim 17, characterized in that the crystal-supporting structural elements (4) are mounted between two spaced apart co-axial rings (1, 2) of the supporting structure of the light fixture.

20. The light fixture according to claim 19, characterized in that the crystal-supporting structural elements (4) are elastically arcuate elements, and by end projections (105) they are fitted in respective bores in the two rings (1, 2).

21. The light fixture according to claim 19, characterized in that in correspondence of at least one point, the two rings (1, 2) are rigidly connected to each other.

22. The light fixture according to claim 19, characterized in that the two rings (1, 2) are connected to each other only by means of the crystal-supporting structural elements (4).

23. The light fixture according to claim 17, characterized in that the crystal-supporting structural elements (4)

1 are made as self-standing elements, and have only one of  
their ends fixed in a freely projecting manner to the  
supporting structure (2) of the light fixture.

5           24. The light fixture according to claim 1, characterized  
          in that the supporting lateral rods consist of "U"  
          shaped wires extending between two spaced apart co-axial  
          rings (1, 2) of the supporting structure of the light  
          fixture, the crystal elements (6) being fitted on the said  
10 wires, possibly with the interposition of spacers (11, 13).

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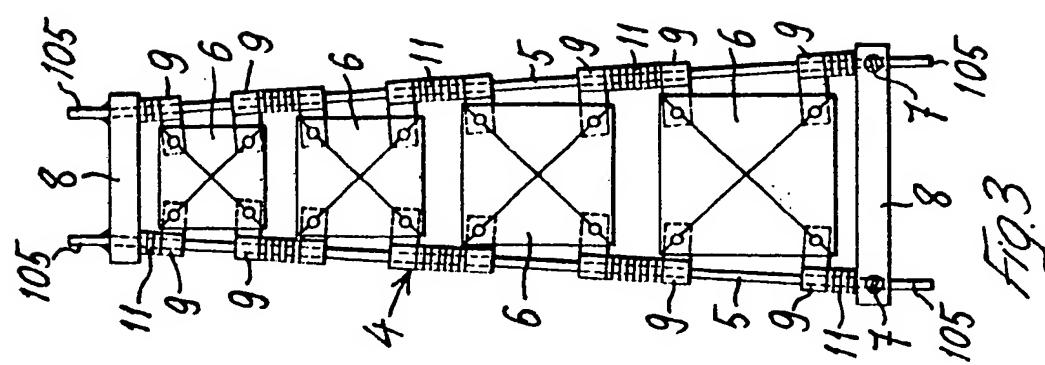


Fig. 3

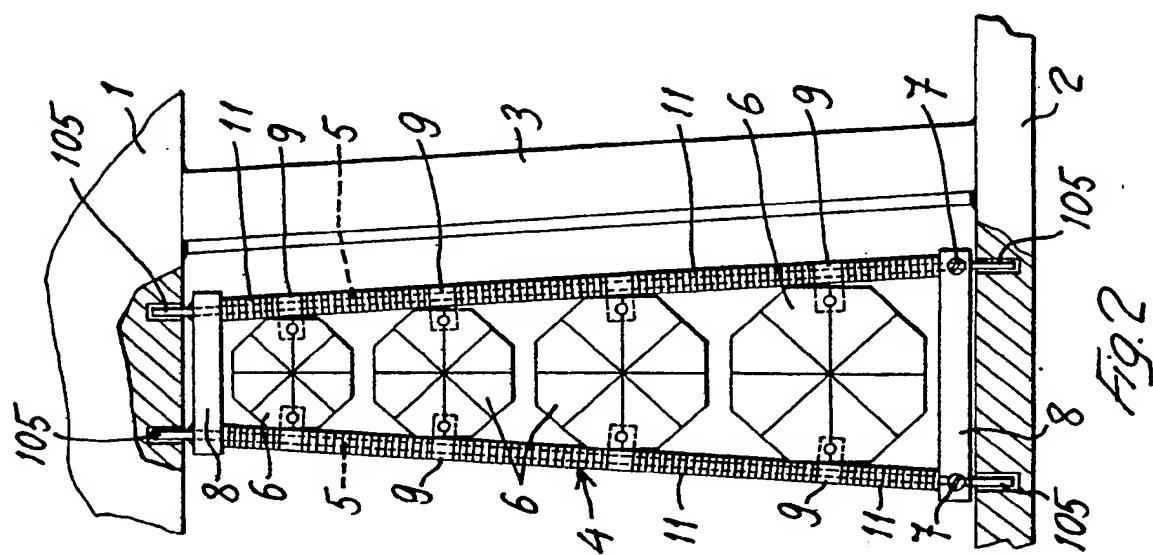


Fig. 2

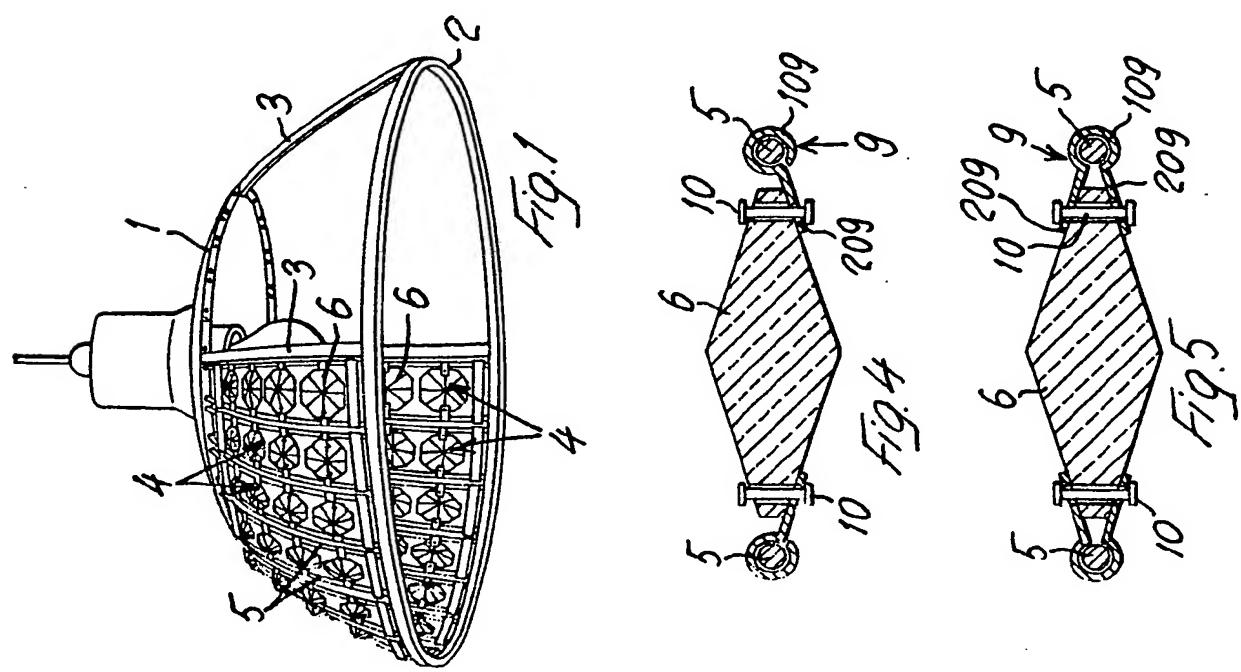


Fig. 1

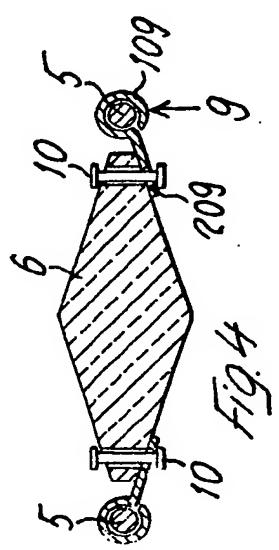


Fig. 4

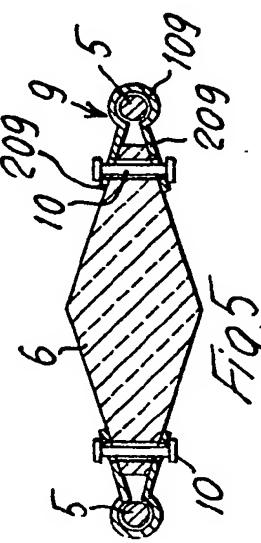
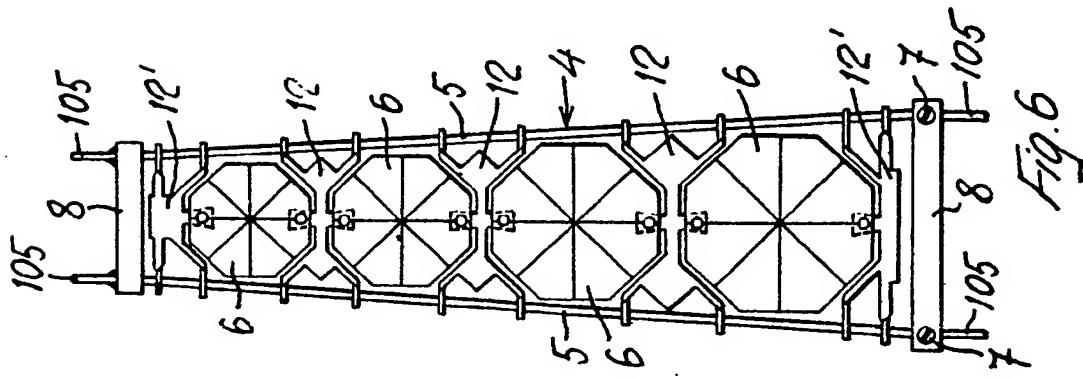
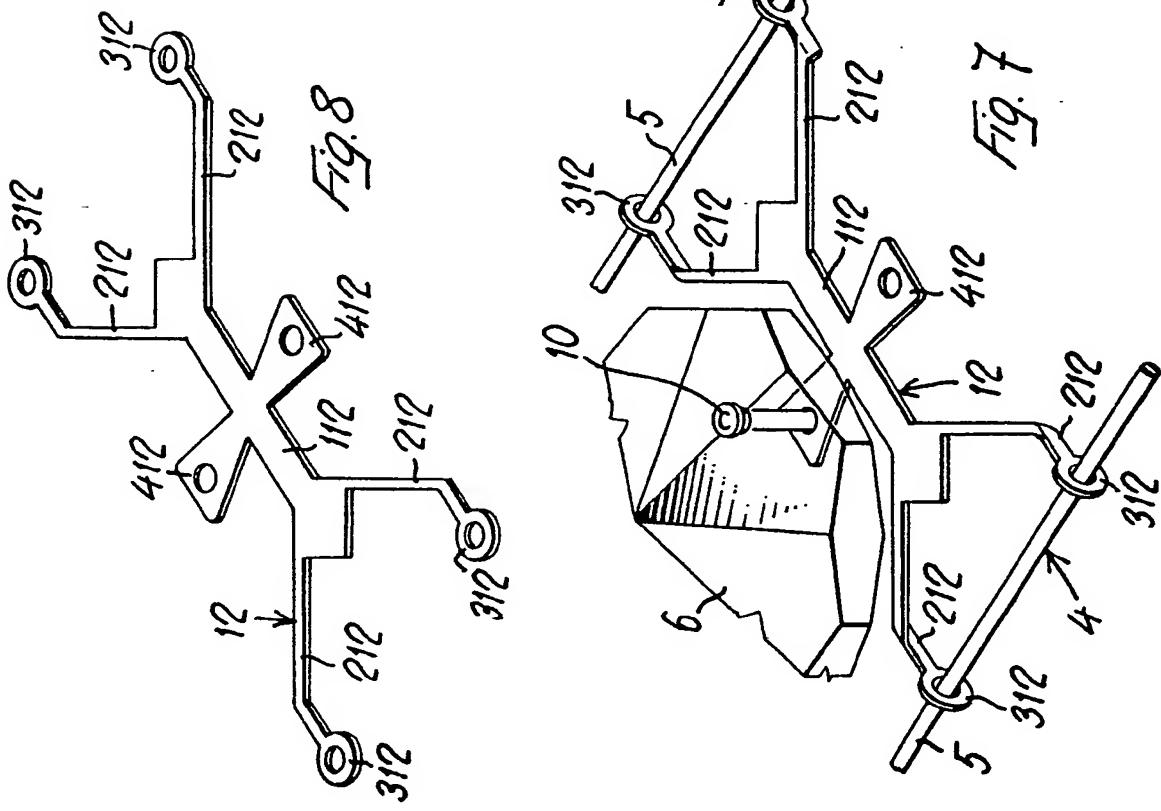
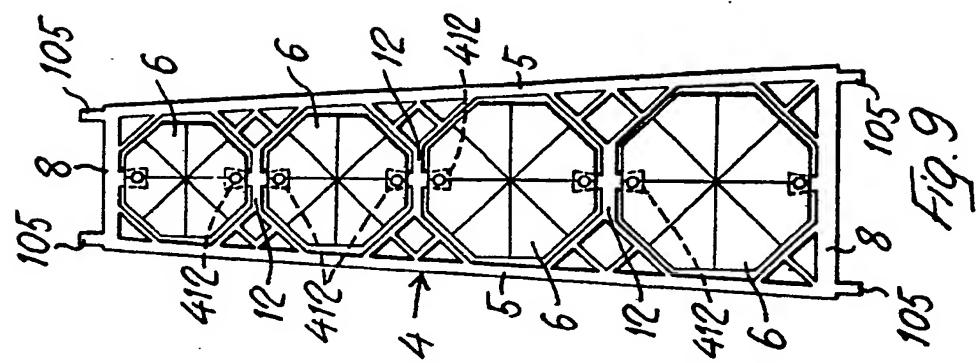
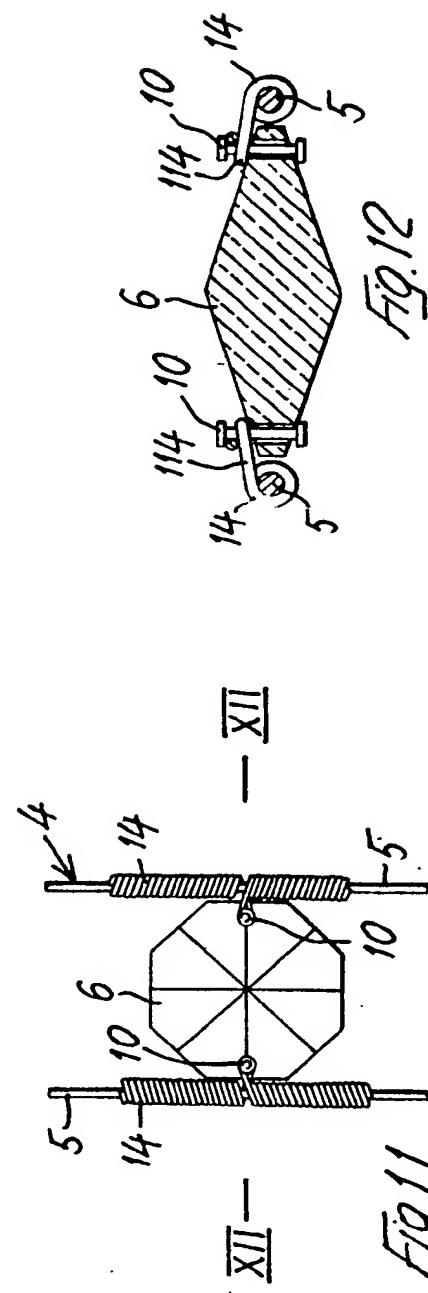
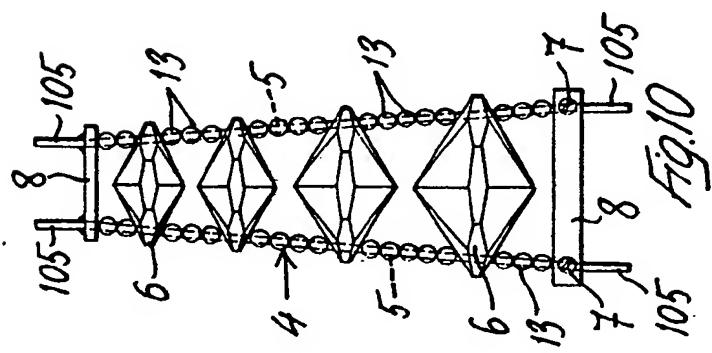
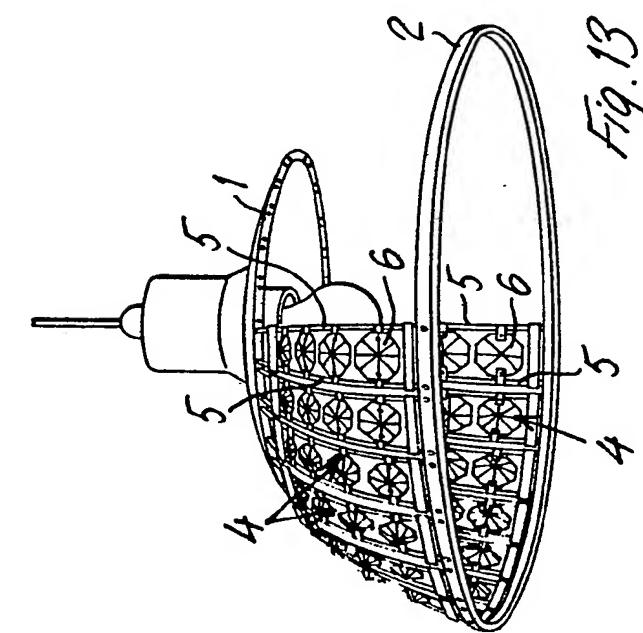
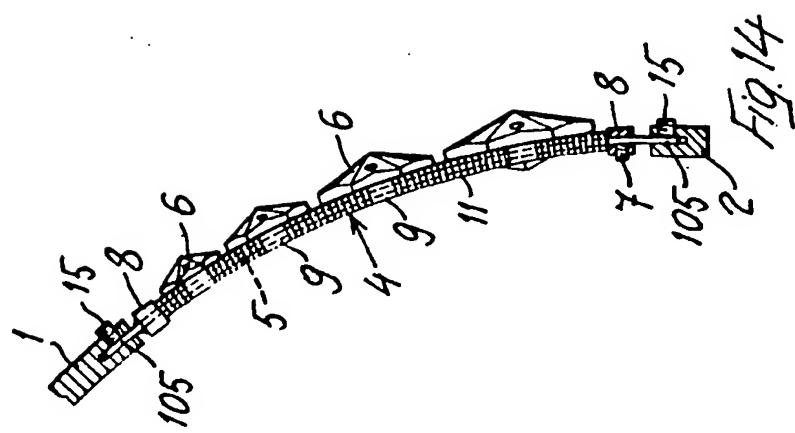


Fig. 5

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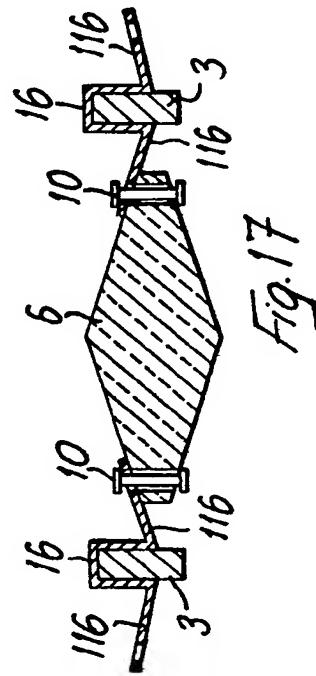
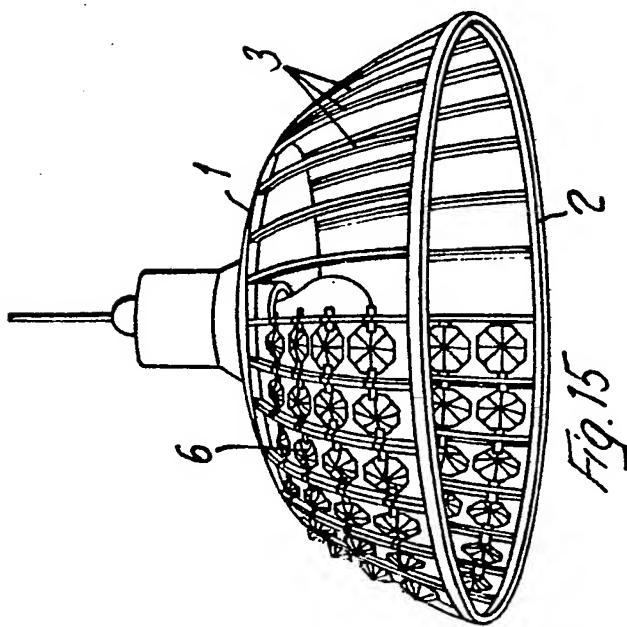
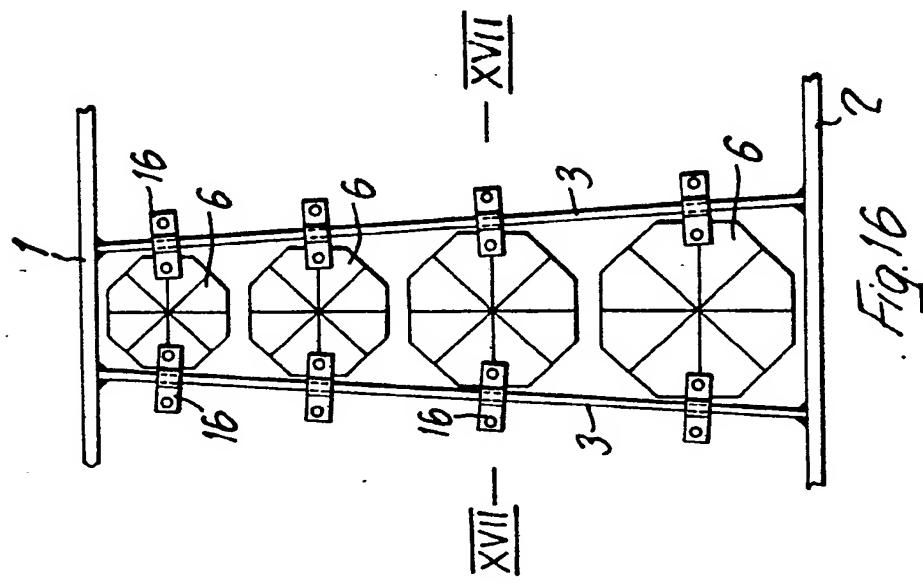
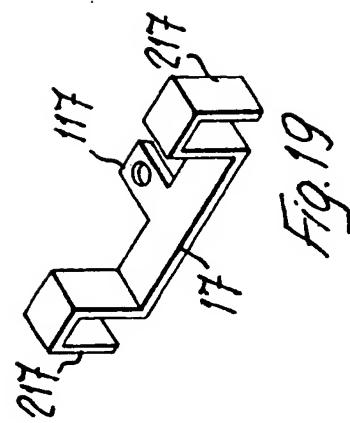
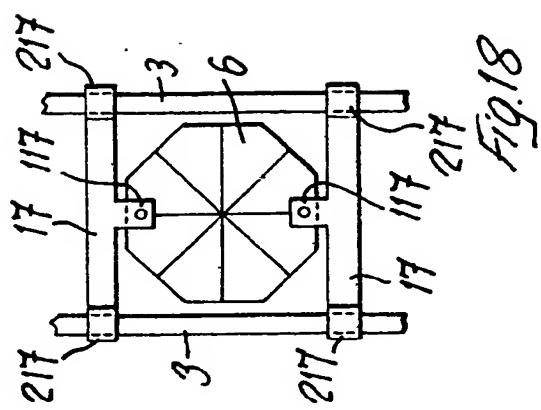
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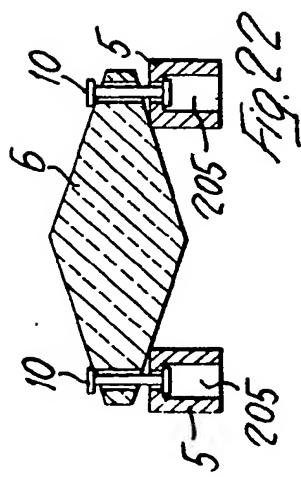


Fig. 22

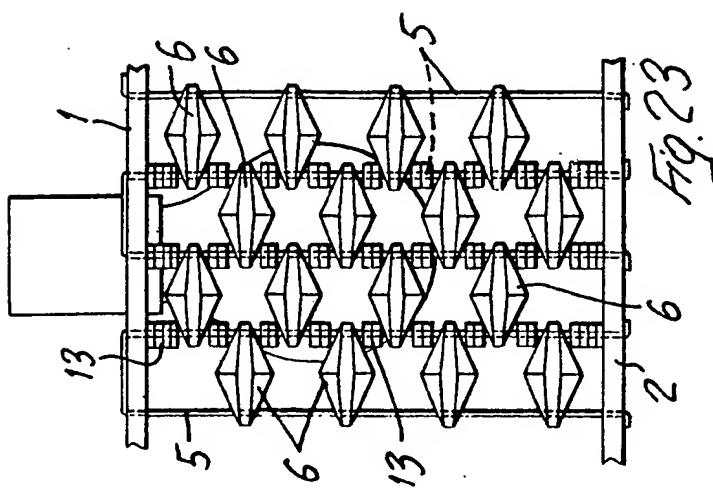


Fig. 23

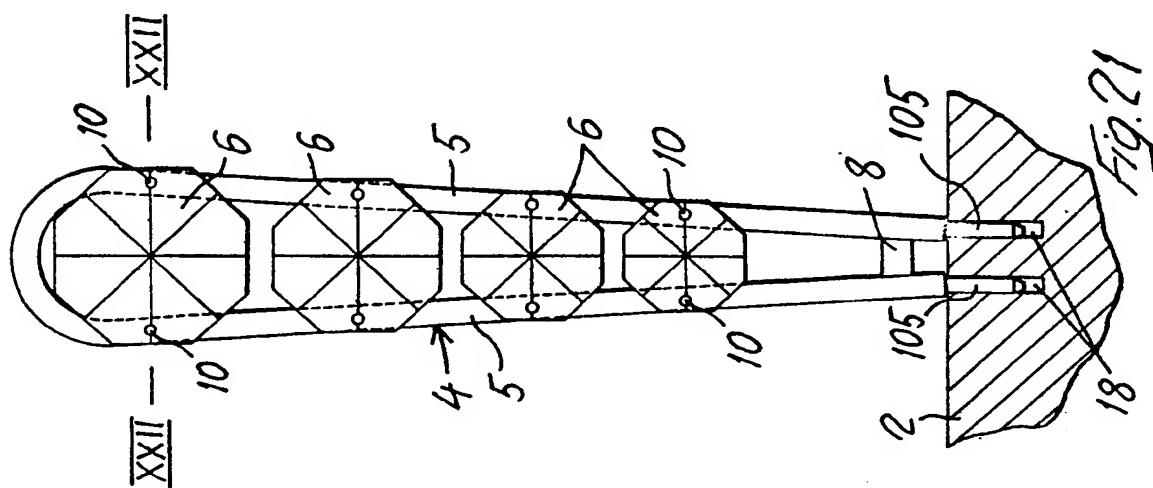


Fig. 21

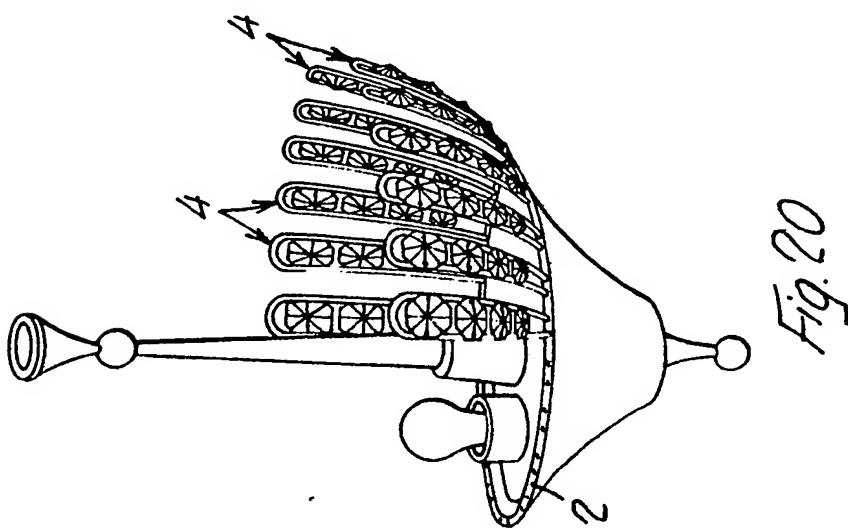


Fig. 20





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## EUROPEAN PATENT APPLICATION

㉑ Application number: 86104566.4

㉓ Int. Cl.: F 21 V 5/06

㉒ Date of filing: 03.04.86

㉔ Priority: 12.04.85 IT 1515685 U  
12.04.85 IT 1515785 U  
24.07.85 IT 1521585 U

㉕ Applicant: Bortoluzzi, Pietro, Via Roma 135,  
I 31010 Godega S.U. (Treviso) (IT)

㉖ Date of publication of application: 12.11.86  
Bulletin 86/46

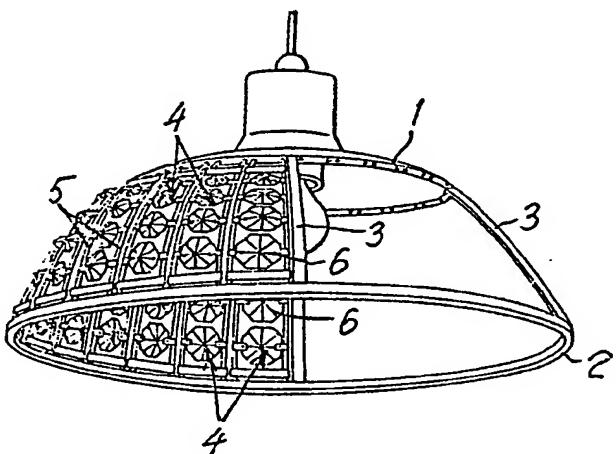
㉗ Inventor: Bortoluzzi, Pietro, Via Roma 135,  
I 31010 Godega S.U. (Treviso) (IT)

㉘ Designated Contracting States: AT BE CH DE FR GB IT LI  
LU NL SE

㉙ Representative: Porsia, Bruno et al, c/o Succ. Ing.  
Fischetti & Weber Via Caffaro 3/2, I-16124 Genova (IT)

㉚ Crystal elements light fixture.

㉛ At least a part of the light fixture consists of at least one row of crystal elements (6) mounted between two supporting lateral rods (5) that can be fastened, preferably in a removable manner, between two spaced apart co-axial rings (1, 2) of the supporting structure of the light fixture.



EP 0 200 924 A3



EP 86 10 4566

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-3 810 295 (KIRTH) * Column 2, line 61 - column 3, line 5; column 4, lines 20-39; figures 1,4,10 * ---	1,4,16	F 21 V 5/06
A	DE-A-2 127 913 (SCHONBEK) * Figures 10,11 * ---	1,9	
A	AT-B- 292 843 (POPP) * Page 1, lines 20-23; figures 4,6,7-12 *	2,3,12	
A	US-A-2 702 341 (TRADELius) * Column 2, lines 51-58; figures 1,2 * ---	16,20	
A	DE-A-2 049 706 (SCHONBEK) * Page 10, paragraph 2; figure 10 * ---	10	
A	DE-A-2 525 755 (PALME & CO.) * Page 7, last line - page 8, line 3; page 12, claim 1; figure 1 * -----	12,23	
TECHNICAL FIELDS SEARCHED (Int. Cl.4)			
F 21 V			
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	24-03-1988	VAN OVERBEEKE J.J.	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			